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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,983	01/31/2001	Christopher J. Curtin	CDST-C122-2P	9089

7590 08/20/2003  
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EXAMINER

WILLIAMS, JOSEPH L

ART UNIT PAPER NUMBER

2879

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/773,983

Applicant(s)

CURTIN ET AL.

Examiner

Joseph L. Williams

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 10-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Amendment A, filed 16 July 2003 has been entered.

Amendment A overcomes the rejections of claims 7-9 under 35 USC § 112, second paragraph.

### ***Claim Objections***

1. Claims 7-9 are objected to because of the following informalities: Regarding claim 7, claims are to begin with a capital and end with a period; thus the word "A" in line 4 of the claim should be "a". Due to their dependency, claims 8 and 9 are necessarily included in this objection.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

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Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Curtin et al. (US 5,477,105).

Regarding claim 7, Curtin ('105) teaches in figure 5 and in column 6, lines 33-43, column 8, lines 27-39, and column 9, lines 42-45, a dual layer electroplated structure (314, 314a, 314b of figure 5) for containing the movement of electrons, the electroplated structure residing within an active region of the flat panel display (best seen in figure 2), the electroplated structure having a cavity (see figure 5, the space between electroplated structures (314)), the electroplated structure containing substantially no organic material (see column 6, lines 33-43, the metals such as nickel, chromium, gold etc.).

Regarding the limitation that the cavity be "adapted to having sub-pixel forming material deposited therein", is an intended use limitation and is thus not afforded patentable weight. Language that suggests or makes optional but does not require steps to be performed or does not limit the claim to a particular structure does not limit the scope of a claim or claim limitation. (see MPEP 2106C)

Regarding claim 8, Curtin ('105) teaches in column 8, lines 27-39 that the dual layer electroplated structure is a black matrix.

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Claims 7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Xie (US 6,094,001).

Regarding claim 7, Xie ('001) teaches in figures 10 and 11 and column 8, lines 55-63, a dual layer electroplated structure (422 and conductive layer applied by 472, leaving a layer of conductive material on layer 422 by electroplating) for containing the movement of electrons, the electroplated structure residing within an active region of the field emission display (best seen in figure 4), the electroplated structure having a cavity (see figure 11, the spaces between electroplated structures (422) either with the emitter tip or focusing structure); the electroplated structure containing substantially no organic material (the metals such as iron-nickel and chromium).

Regarding the limitation that the cavity be "adapted to having sub-pixel forming material deposited therein", is an intended use limitation and is thus not afforded patentable weight. Language that suggests or makes optional but does not require steps to be performed or does not limit the claim to a particular structure does not limit the scope of a claim or claim limitation. (see MPEP 2106C)

Regarding claim 9, Xie ('001) teaches that the dual layer electroplated structure is a gate structure, which controls the direction of the electrons emitted from emitter 420.

***Response to Arguments***

3. Applicant's arguments filed 16 July 2003 have been fully considered but they are not persuasive. Please refer to the above rejections, in particular concerning the Examiner's interpretation of the "cavity" and the "adapted to" limitation of independent claim 7.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (703) 305-1670. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



JLW  
August 12, 2003



ASHOK PATEL  
PRIMARY EXAMINER